#### PROJECT DESCRIPTION

#### I. GENERAL

This project involves the modification of the existing traffic signal at the intersection of MD 26 (Liberty Road) with Wards Chapel Road in Baltimore County, Maryland to operate during MOT Phase 2A.

MD 26 is assumed to run in an east-west direction.

#### II. INTERSECTION OPERATION

1. The existing pole-mounted signal cabinet and controller will remain in operation.
The intersection is to operate in a NEMA 6-phase, fully-actuated mode. Video detection will be placed into operation on all approaches.

## NOTES

- 1. For MOT/final pavement markings, refer to the MOT/pavement marking plans, as applicable; other than those detailed on the plan. All pavement markings shall be installed in accordance with Administration standards.
- The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly labeling each cable.
- 3. All traffic signal foundations shall be installed at the final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in the appropriate 800 series Standard Plates. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
- 4. The contractor shall be responsible for delivering the video interface equipment to the SHA signal shop. SHA forces will complete the retrofit of all signal equipment.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- The contractor shall maintain the continuous operation of all vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.

#### CONTACTS

| DISTRICT  | OFFICE OF TRAFFIC AND SAFETY                                  |
|---|---|
| MR. DAVID PEAKE   |   |
| DISTRICT ENGINEER 410-229-2310                              | MR. RICHARD DAFF SR.  |
| 410-229-2310  | CHIEF, TRAFFIC OPERATIONS 410-787-7630                        |
| MS. ERIN KUHN   | 410-161-1630  |
| ASSISTANT DISTRICT ENGINEER - TRAFFIC                       | MR. ROBERT SNYDER   |
| 410-229-2381  | ASSISTANT DIVISION CHIEF. TRAFFIC OPERATIONS                  |
| MD MICHAEL BASCHARISH C                                     | 410-787-7630  |
| MR. MICHAEL PASQUARIELLO UTILITY ENGINEER                   |   |
| 410-229-2341  | MR. ED RODENHIZER   |
| 710 223 2371  | TEAM LEADER SIGNAL OPERATIONS 410-787-7650                    |
| MR. DONALD SCHAEFER   | 410-101-1030  |
| ASSISTANT DISTRICT ENGINEER - CONSTRUCTION                  | MR. EUGENE BAILEY   |
| 410-229-2421  | TEAM LEADER SIGN OPERATIONS                                   |
| MD ANDRE EUTDELL  | 410-787-7670  |
| MR. ANDRE FUTRELL ASSISTANT DISTRICT ENGINEER - MAINTENANCE | NO DADIENE EXDE   |
| 410-229-2361  | MS. DARLENE EIDE<br>SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) |
|   | 410-787-7668  |
| FOLLEM  | ENT LIST  |
| - CAOILM  | ICIAI CIOI  |

## A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

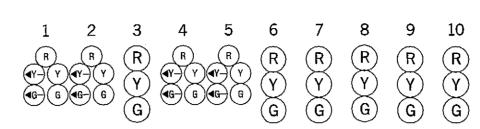
| CAT CODE                   | DESCRIPTION  | UNITS                      | QUANTITY          |
|----------------------------|--|----------------------------|-------------------|
| 900000<br>900000<br>973023 | VIDEO DETECTION ACCESS POINT VIDEO DETECTION INTERFACE PANEL SHEET ALUMINUM SIGNS CONSISTING OF: M1-5(6) (36" X 72") M1-5(6) (24" X 48") | EA<br>EA<br>SF<br>EA<br>EA | 1<br>1<br>69<br>1 |
|                            | D-3(1)(VAR. X 16")   | EA                         | 4                 |

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

| B. EQUIPM        | ENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR  |          |           |
|------------------|---|----------|-----------|
| CAT CODE         | DESCRIPTION   | UNITS    | QUANTITY  |
| 114245<br>114280 | 24 INCH WHITE REMOVABLE PREFORMED PAVEMENT LINE MARKING REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH | LF<br>LF | 5<br>5    |
| 203030           | TEST PIT EXCAVATION   | CY       | 1         |
| 800000           | REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT   | LS       | 1         |
| 800000<br>800000 | VIDEO DETECTION CAMERA PULL BACK AND REROUTE EXISTING TRAY CABLE  | EA<br>LF | 4<br>150  |
| 801607           | INSTALL SHEET ALUMINUM SIGN   | SF       | 26        |
| 802501           | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE  | LF       | 100       |
| 805115<br>805135 | 3 INCH SCHEDULE 80 PVC CONDUIT - BORED 3 INCH SCHEDULE 80 PVC CONDUIT - TRENCHED                              | LF<br>LF | 80<br>330 |
| 805140           | 4 INCH SCHEDULE 80 PVC CONDUIT - TRENCHED   | LF       | 20        |
| 805150           | 3 INCH SCHEDULE 80 PVC CONDUIT - SLOTTED  | LF       | 50        |
| 805155<br>810605 | 4 INCH SCHEDULE 80 PVC CONDUIT - SLOTTED NON-INVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE                       | LF<br>EA | 80<br>1   |
| 811001           | FURNISH AND INSTALL ELECTRICAL HANDHOLE   | EA       | 6         |
| 813015           | INSTALL OVERHEAD SIGN   | SF       | 43        |
| 837001<br>860284 | GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH 12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION                 | EA<br>EA | 2<br>38   |
| 861107           | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)   | LF       | 80        |
| 861108           | ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)   | LF       | 775       |

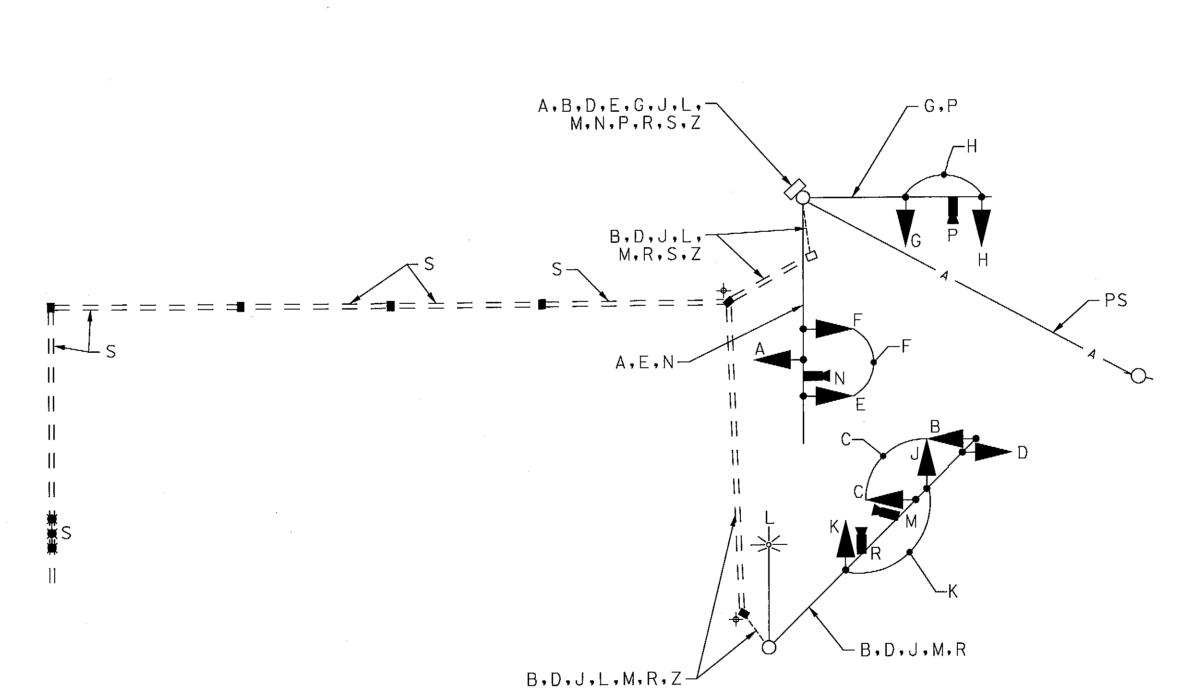
C.THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

### PHASE CHART



| PHASE 1 AND 5                                  | <b>←</b> G⁄R | <b>4</b> ·G∕R | R    | <b>←</b> G⁄R | <b>←</b> G⁄R | R    | R    | R    | R    | R    |  |
|--|--------------|---------------|------|--------------|--------------|------|------|------|------|------|--|
| 1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6 |              |               |      |              |              |      |      |      | 7    |      |  |
| PHASE 1 AND 6                                  | <b>←</b> G⁄G | <b>←</b> G⁄G  | G    | R            | R            | R    | R    | R    | R    | R    | <del>                                   </del> |
| 1 AND 6 CHANGE                                 | +Y⁄G         | <b>←</b> Y/G  | G    | R            | R            | R    | R    | R    | R    | R    |  |
| PHASE 2 AND 5                                  | R            | R             | R    | <b>←</b> G⁄G | <b>←</b> G⁄G | G    | R    | R    | R    | R    | <b>↑</b>                                       |
| 2 AND 5 CHANGE                                 | R            | R             | R    | <b>←</b> Y⁄G | 4-Y∕G        | G    | R    | R    | R    | R    | + √ +  |
| PHASE 2 AND 6                                  | G            | G             | G    | G            | G            | G    | R    | R    | R    | R    | <u></u>  |
| 2 AND 6 CHANGE                                 | Υ            | Υ             | Υ    | Υ            | Υ            | Υ    | R    | R    | R    | R    |  |
| PHASE 4 AND 8                                  | R            | R             | R    | R            | R            | R    | G    | G    | G    | G    |  |
| 4 AND 8 CHANGE                                 | R            | R             | R    | R            | R            | R    | Υ    | Υ    | Υ    | Υ    | -    -    -    -    -    -    -    -           |
| FLASHING<br>OPERATION                          | FL/Y         | FL/Y          | FL/Y | FL/Y         | FL/Y         | FL/Y | FL/R | FL/R | FL/R | FL/R | † Д<br>Т                                       |

## WIRING DIAGRAM



<u>KEY</u>

7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

VIDEO DETECTION CABLE

s) NON-INVASIVE PROBE 1,000 FOOT LEAD-IN CABLE

L) REROUTED TRAY CABLE

z 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE

GROUND ROD

# MOT PHASE 2A

SHEET NO. 40 OF 47

SXA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 26 (LIBERTY ROAD) AT WARDS CHAPEL ROAD
RANDALLSTOWN, MARYLAND

## GENERAL INFORMATION SHEET

TS NO. 621E DRAWING NO. pSG OF N001

 DESIGNED BY
 A. GRIFFIN
 COUNTY
 BALTIMORE

 DRAWN BY
 A. GRIFFIN
 LOGMILE
 03002601.22

 CHECKED BY
 K. RINIKER
 T.I.M.S. NO.
 K061

 F.A.P. NO.
 SEE TITLE SHEET
 TOD NO.

SCALE N.T.S. DATE AUGUST 2011 CONTRACT NO. BA6125187

SABRA, WANG & ASSOCIATES, INC 1504 JOH AVENUE SUITE 160 BALTIMORE, MD 21227 (410) 737-6564

WWW.SABRA-WANG.COM

PLOTTED: Monday, August 22, 2011 AT 06:24 PM
FILE: R:\2007\45 BCS 2007-04F\_Hwy Eng\_D4\_STV\_\$120K\Task 6 MD 26 at Wards Chapel\dwg\Signals\pSG-N001\_MD26.DGN